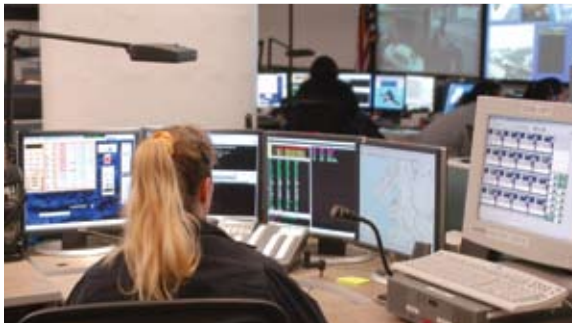

Technical Assistance Catalog

Office of Emergency Communications

TA-OEC-CATALOG-001-D2

June 2009

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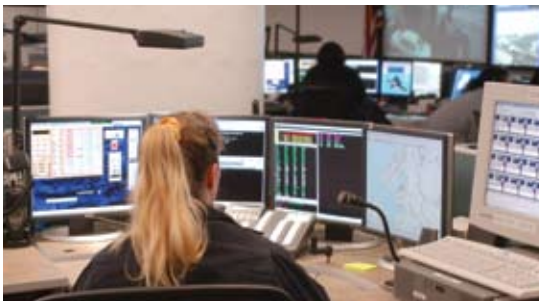


TA Offerings

The U.S. Department of Homeland Security (DHS) Office of Emergency Communications, Interoperable Communications Technical Assistance Program (OEC/ICTAP) supports and promotes the ability of emergency responders and government officials to continue to communicate in the event of natural disasters, acts of terrorism, or other man-made disasters, and works to ensure, accelerate, and attain operable and interoperable emergency communications nationwide.

The mission of OEC/ICTAP is to enhance interoperable communications among local, State/Territory, Tribal and Federal emergency responders and public safety officials. OEC/ICTAP representatives provide support for planning, operations, technical issues, and policy decisions that need to be considered when developing interoperable communications initiatives. The goal of the OEC/ICTAP program is to improve the abilities of public safety agencies across multiple disciplines and jurisdictions to communicate effectively as they work to manage disasters, emergency incidents, and planned events.

Over the past several years, OEC/ICTAP has assembled, trained, and fielded a wide array of dedicated subject matter experts with the appropriate skills, experience, and abilities to address each request for technical assistance (TA). The team combines both operations-based skills and technical expertise to bring a wide range of interoperable communications knowledge to each site.

OEC/ICTAP Service Offerings directly support the National Emergency Communications Plan (NECP), the Nation's first strategic plan to improve emergency response communications. The NECP sets strategic goals and identifies national objectives to enhance governance, planning, technology, training and exercises, and disaster communications capabilities. The NECP provides recommendations and milestones to guide emergency responders and relevant government officials to make measurable improvements in emergency communications over the next three years. The NECP is designed to drive measurable and sustainable improvements over the next five years consistent with the: National Response Framework; National Incident Management System; National Preparedness Guidelines; and Target Capabilities List. OEC/ICTAP Service Offerings alignment to the NECP State/Local Milestones can be found in Appendix A. The NECP can be found online at http://www.dhs.gov/xnews/releases/pr_1217529182375.shtm.

OEC/ICTAP services are supported by Federal funding and are provided at no cost to the requesting agencies or organizations.

The services that may be requested through OEC/ICTAP are described in this catalog. Types of services are categorized into seven major topic areas:

1. **Governance and Standard Operating Procedure Support**
2. **Communications Unit Training and Support**
3. **Communications Operations Support**
4. **Communications Systems Engineering Support**
5. **Tactical Communications Enhancement Support**
6. **Regional Communications Enhancement Support**
7. **Communication Assets Survey and Mapping (CASM) Support**

Each item in the catalog is listed by title within a specific category. A brief narrative provides a general description of the scope of services provided under the specific category. A listing of deliverables provided to the requesting organization is also included.

Services described in the catalog may be combined or tailored to suit the needs of the requesting organization. For example, one or more of the catalog items may be combined as a package to accomplish a single project or initiative. Service Packages are denoted by a light green background. Similarly, a requesting organization has the option of receiving only part of the services described under a single item if all elements are not required to address the requestor's requirements.

To request OEC/ICTAP services as a State/Local/Tribal Agency:

1) Review the OEC/ICTAP catalog of services and select the desired item(s)
2) Complete the technical assistance request form (see page 55 of catalog):
   - Enter the name and contact information of the agency, organization, or jurisdiction submitting the request
   - List technical assistance requests in priority order, highest to lowest
   - Using the titles listed in the catalog, select the item(s) corresponding to the technical assistance requested for each initiative
   - Provide the anticipated month for delivery and completion of each TA service
   - Indicate whether the requesting entity is a State, local, Both (combination of State and local), Tribal, or regional organization
   - Provide any additional relevant information regarding specific needs that relate to the request for assistance
   - The Statewide Interoperability Coordinator (or DHS-authorized representative) / Statewide Communications Interoperability Plan (SCIP) Point of Contact must sign, date, and submit the TA Request Form
3) Submit the completed TA Request form to the designated State Administrative Agency (SAA)
4) The SAA must approve the request and submit the signed TA Request Form to DHS via E-Mail to oec@dhs.gov

Governance and Standard Operating Procedure Support

Governance

Governance refers to a common structure for solving interoperability issues through improvement of policies, processes, and procedures of any major project by enhancing communication, coordination, and cooperation; establishing guidelines and principles; and reducing any internal jurisdictional conflicts. Governance involves decision-making groups responsible for ongoing planning and implementation of interoperable communications initiatives. A formal governance structure is critical to the success of interoperability planning. OEC/ICTAP provides assistance with reviewing and evaluating existing governance structures, and providing recommendations for establishing new governance bodies or structures.

Governance Support services include:

- GOV-ASMT: Existing Governance Structures Assessment
- GOV-GSM: Governance Structure Models Development
- GOV-DOC: Governance Documentation Assessment and Development
- GOV-SCIP: Follow-up Statewide Communication Interoperability Plan (SCIP) Implementation Workshop
- GOV-KEYM: Key Management Plan Support

GOV-ASMT: Existing Governance Structures Assessment

Description

This service offering provides a comprehensive assessment of the organizations, structures, and other decision-making bodies in place that are tied to interoperable communications in the target jurisdiction. A report is provided containing recommendations to the current environment or structure intended to improve or enhance the oversight of interoperable communications activities in the jurisdiction.

This assessment includes an identification of the governance bodies, their composition, organizational structure, roles and responsibilities, the scope of authority, the authority by which the governance bodies were established, and how they interrelate to other governance groups in the same jurisdiction or geographic area, and a description of associated documents connected to the group such as Memoranda of Understanding (MOUs), charters, agreements, and by-laws, etc.

The results of the assessment are compiled in a report format and provided/presented to the participants. Areas of overlap, duplication, or potential for confusion over authority, roles, and responsibilities are identified, along with suggested actions to resolve the described issues.

Deliverables

- On-site workshops and meetings
- Final Assessment Report

GOV-GSM: Governance Structure Models Development

Description

This service offering provides models for the development of structures, strategies, and decision-making systems to committees and/or working groups responsible for the ongoing planning and implementation of interoperable communications initiatives.

This OEC/ICTAP Governance Structure Models Workshop addresses the characteristics of successful governance models, organizational structures, models for effective charters and/or bylaws; provides examples of governance roles and responsibilities; and discusses performance measures. Workshop attendees discuss and develop recommendations for governance structures covering the desired geographical area and applicable jurisdictions.

Workshop participants discuss processes for identifying and including all relevant stakeholders. OEC/ICTAP Workshop facilitators provide definitions and examples of roles, responsibilities, and relationships of effective governance groups. Recommendations are provided for the development of a strategic action plan by which goals and objectives are achieved, potential challenges are identified, and a mechanism is developed to regularly evaluate progress and effectiveness of planning efforts.

Deliverables

- On-site workshops and meetings
- Document models and templates

GOV-DOC: Governance Documentation Assessment and Development

Description

This service offering provides a review of existing/proposed governance documents and/or assistance developing new governance documents to provide constructive feedback, and identify opportunities for enhancement that could lead to more effective communications interoperability planning, activities, and operations. This service offering also provides a review of current processes for developing, revising, and storing governance documents and recommendations for improvements.

There is a wide variety of documents that are associated with governance. These include formal statutory, legislative, or executive orders establishing governance structure and bodies. Other examples include by-laws, charters, MOUs, Mutual Aid Agreements, and various other types of agreements. Participants are provided with templates and samples used for developing formal charters, MOUs, Mutual Aid Agreements, Frequency/Radio System Sharing agreements, or other applicable agreements for governance groups, as well as a discussion of the lessons learned and methods used for communications interoperability governance models used by communities across the country.

Templates and samples for all document models include definitions of the purpose, authority, scope, operating principles, membership, decision-making processes, and expected outcomes. Recommendations are provided for the structuring of the various types of documents, questions, and issues to address when generating content for each of the document sections. OEC/ICTAP subject matter experts can help the requester populate governance document templates, upon request.

Deliverables

- On-site workshops and meetings
- Document models and templates
- Populated document drafts
- Governance Document Process Review Report

NEW

GOV-SCIP: Follow-up Statewide Communication Interoperability Plan (SCIP) Implementation Workshop

Description

This service offering provides an experienced facilitator and a note taker to coordinate and execute a follow-up workshop to the one-day SCIP Implementation Workshops OEC offered each State and Territory between October 2008 and June 2009. The focus of the workshop is to help the State/Territory implement its SCIP and accomplish its priorities. Workshop outcomes will vary according to the needs of each State/Territory. At a minimum, participants will leave with a solid understanding of the State's/Territory's current status, gaps, and initiatives and how OEC's work will support these efforts. Additional outcomes may include development of a project plan for SCIP initiatives, prioritization (or reprioritization) of initiatives, and establishment or alteration of expected completion dates. Prior to each workshop, OEC will interview the Statewide Interoperability Coordinator/SCIP point of contact to discuss progress since the previous SCIP Implementation Workshop and the priorities and needs of the State/Territory. This will help determine the approach and focus of each workshop. OEC will work with the Statewide Interoperability Coordinator/SCIP point of contact to determine who should attend the workshops based on their desired outcomes. The requesting State's/Territory's working group (that is, workshop attendees) should consist of the Statewide Interoperability Governing Body members at a minimum and other communications, planning, and operational representatives from multiple area agencies and jurisdictions across all public safety/service disciplines, including nongovernmental organizations, volunteers and tribal entities.

Suggested participants would include, but are not limited to:

- Statewide Interoperability Coordinator/SCIP point of contact
- Members of the Statewide Interoperability Governing Body
- Law enforcement, Fire, and Emergency Medical Service (EMS) communication specialists
- Law enforcement, Fire, and EMS incident management staff
- Agency planners and funding coordinators (for example, the State Administrative Agency [SAA])
- Communication coordinators and supervisors
- Communications Unit Leaders
- Incident communication center managers
- Radio operators
- Technical specialists

Deliverables

- On-site workshop facilitation
- Meeting Report
- Additional deliverables will vary depending on the focus of the workshop

NECP Alignment | **Initiative 1.1, 3.1, 7.2**

NEW GOV-KEYM: Key Management Plan Support

Description

This service offering is designed to help develop a Key Management Plan. Controlled distribution, loading, storing, and destroying of key materials is essential to effectively maintaining encrypted communications. The complexity of generating encryption keys and distributing those keys to all subscriber units in a synchronized fashion introduces inherent risks if proper key management processes are not followed throughout the key lifecycle. If the appropriate procedures and safeguards are not implemented and maintained, keys could be disclosed, modified, or substituted by unauthorized personnel. Compromise of encryption keys could seriously affect the integrity, confidentiality, and availability of sensitive communications. These risks can be significantly mitigated through adequate key controls, proper education on encryption key management, and developing a Key Management Plan.

OEC subject matter experts (SME)s and engineers partner directly with the requesting agency to define and document the following:

Key Generation. Describes the key generation process and defines stakeholder responsibilities in generating encryption key material

Key Distribution. Describes key distribution methods (that is, manual and over-the-air-rekeying [OTAR]) and stakeholder responsibilities, and addresses key distribution considerations (for example, vendor-specific equipment)

Key Storage. Describes electronic and physical security controls for the storage of key materials and outlines stakeholder responsibilities specific to key storage

Key Destruction. Describes key destruction scenarios (that is, if the key has been compromised or has reached the end of its lifecycle), provides an overview of the key destruction process, discusses key destruction methods and emergency destruction procedures, and explains stakeholder responsibilities

Key Maintenance. Describes the procedures for routine and emergency maintenance necessary to ensure key management equipment operates effectively throughout the key lifecycle

Continuity Planning. Describes the procedures for alternate key management implementation in the event of technological or logistical issues with the primary system

Training. Describes the training programs and procedures necessary to maintain user knowledge and system accreditation

Deliverables

- Workshops and meetings for Key Management Plan development
- Key Management Plan outline
- Recommended inputs for the Key Management Plan

Standard Operating Procedures and Communications Support

Standard Operating Procedures (SOPs) are formal written guidelines or instructions that typically have both operational and technical components. In many cases, SOPs are designed to coordinate across disciplines and jurisdictions on a day-to-day or emergency basis. Clearly defined interoperable communications SOPs facilitate an orderly and efficient response to multiagency incidents and events as routine as daily calls for service and as catastrophic as large scale disasters.

In addition to SOPs, various urban area, regional, State/Territory, Tribal, and/or Federal Departments/Agencies planning documents include specific communications components. Planning documents where communications play a role include, but are not limited to:

- Emergency Operations Plans (EOP)
- EOP Communications Annexes/Annex K (Annex K is the primary document for publishing communications system guidance)
- Emergency Support Function (ESF) #2
- Continuity of Operations Plans (COOP)
- Continuity of Government (COG)
- Capabilities assessment planning
- Statewide Communication Interoperability Plan (SCIP)
- Tactical Interoperable Communications Plan (TICP)

SOP/Communications Plan Support services include:

- SOP-ASMT: Standard Operating Procedures/Communications Plan Assessment
- SOP-DEV: Standard Operating Procedure/Communications Plan Development

SOP-ASMT: Standard Operating Procedures/Communications Plan Assessment

Description

This service offering provides an independent third-party assessment of existing or proposed Standard Operating Procedures (SOPs) or Communications Plans. Assessment subject matter experts (SMEs) possess various skill sets (that is, operations, engineering, or governance) to ensure the team's ability to evaluate all facets of the procedure/plan and provide professional, detailed inputs.

OEC/ICTAP presents the results of the SOP/Communications Plan Assessment through a detailed and thorough Assessment Report designed to document identified strengths, concerns, and areas for improvement. The Assessment Report also includes professional recommendations designed to resolve identified gaps, improve the applicability and functionality of the procedure/plan, and enhance regional interoperable communications response capabilities.

Review topics in this assessment may include key elements such as:

- Operational applicability
- Scope and authority
- Content and format
- Participating agencies
- NIMS compliance
- Compatibility with other local, regional, State/Territory, Tribal and/or Federal procedures/plans
- SOP approval mechanisms
- Responsibility and process for maintenance and update
- Training requirements
- Dissemination process, etc.

Urban areas, regions, States/Territories and Tribes may request SOP/Communications Plan Assessment Reports in various forms, based on their reporting needs. Therefore, the content and depth of the final deliverables is determined by user needs and will be tailored to the requirements of each individual request.

Deliverables

Varied based on request need and may include:

- Final Assessment Report
- Final Assessment Report Presentation

NECP Alignment | **Initiative 3.1, 3.3, 7.2**

SOP-DEV: Standard Operating Procedures/Communications Plan Development

Description

This service offering provides an experienced facilitator, data specialist, and public safety subject matter experts (SMEs) to conduct an SOP or Communications Plan Development Workshop. OEC/ICTAP SOP Workshop personnel provide instruction and guidance related to the development of both the operational and technical facets of interoperable communications SOPs or Plans. OEC/ICTAP personnel partner directly with the requesting urban area, regional, State/Territory, Tribal and/or Federal Department/Agency working groups to define and document the scope, tone, and content of the required SOPs or Plans.

OEC/ICTAP presents participants with examples, models, and templates used for creating various types of SOPs. Other topics discussed during the workshop include:

- Authority
- Agencies/jurisdictions covered by the SOP/Plan
- Content and format
- National Incident Management System (NIMS) compliance
- SOP/Plan approval process
- SOP/Plan dissemination, training requirements
- Frequency of usage
- Ongoing maintenance and update process
- Any other elements unique to the target jurisdiction(s)

OEC/ICTAP SOP Workshop personnel also work with participants to minimize the possibility of conflict with other existing SOPs/Plans at the local, regional, State/Territory, Tribal and/or Federal levels.

Urban areas, regions, States/Territories, Tribes, and Federal Departments/Agencies may develop various types of plans and procedures during the workshop process, based on their individual needs. The final deliverables are, therefore, tailored to meet the requirements of each individual request.

Deliverables

- On-site workshop facilitation
- Document models and templates
- Populated SOPs and/or Plans

NECP Alignment | **Initiative 3.1, 3.3, 7.2**

Communications Unit Training and Support

Training refers to gaining the knowledge, skills, and competencies needed to perform critical communications unit tasks. Training levels begin with orientation and progress through awareness, operational, supervision, management, and executive applications.

The Communications Unit Training provided by OEC/ICTAP addresses all of these principles while retaining a focused emphasis on communications. Because communication is an inherently hands-on activity, the training focuses on practical skills to operate communication assets in your area.

Communications Unit Training technical assistance is categorized into the following discrete services. Urban areas, regions, States/Territories, Tribes, and Federal Organizations may request service offerings individually or in any combination. Each service offered here can also be requested in combination with services in other categories included in this catalog.

Communications Unit Training and Support services include:

- TRG-COML: All-Hazards Type III Communications Unit Leader (COML) course
- TRG-COML TtT: All-Hazards Type III COML Train the Trainer course
- TRG-ICS: Communication Unit Integration into the National Incident Management System (NIMS)/ Incident Command System (ICS) Workshop

OEC/ICTAP is developing two additional courses that focus on other positions in the Communications Unit, including the Incident Communications Technician (COMT) are being developed which will be available when approved for delivery.

A Communications Unit Awareness Course will also be available soon. The Awareness Course targets all ICS positions, and provides a basic understanding of Communications Unit terminology, organization, and functions. The Awareness Course is designed to be an independent study online course that typically takes 2 to 4 hours to complete but can also be facilitated by an OEC/ICTAP Instructor to enhance the presentations and/or answer any questions.

TRG-COML: All-Hazards Type III Communications Unit Leader (COML) Course

Description

This service offering helps participants create programs to deliver initial and refresher training specific to the COML position.

The Communications Unit in the ICS structure contains several positions. The COML is the focal point for a recently developed training course for the All-Hazards Type III COML position. The All-Hazards Type III COML Course is available to provide DHS approved National Incident Management System (NIMS) compliant COML instruction to ensure that every State/Territory has trained personnel capable of coordinating on-scene emergency communications during a multi-jurisdictional response or planned event. It is a three (3) day course for a total of 24 hours. The course is presented with facilitated lecture and student exercises. There is adequate time built in to the course to facilitate interactive discussions and exercises. Instructors will work through the discussions and exercises to explain processes used to reach communication operability, interoperability, and be able to incorporate any additional communication solutions. The COML course is targeted for all local, regional, State, Tribal, and Federal cross disciplinary emergency response professionals and coordination/support personnel with a communication background.

Deliverables

- On-site workshops and meetings
- On-site user and/or trainer training

NECP Alignment | **Initiative 3.2, 5.3, 7.2**

NEW

TRG-COML TtT: All-Hazards Type III Communications Unit Leader (COML) Train the Trainer Program

Description

This service offering helps States and Territories create a self sustaining COML training program by providing instructor training to individuals who have completed Communications Unit training at the Unit Leader level.

The course consists of a one day training session, for a total of eight hours. The course is presented with facilitated lecture, student exercises and presentations. Instructors will work through the discussions and exercises to explain processes used to provide the knowledge and skills necessary to effectively teach the COML course.

The course consists of lecture/discussion and small group activities, with individual presentations. This course is designed so that States and Territories may develop their own cadre of COML instructors. Prerequisites for the students are as follows:

- Students must have successfully completed an OEC approved All-Hazards Type III COML course
- Students must have completed an All-Hazards Type III COML Task Book, signed by a State/Territory-recognized signatory
- Students must have instructor credentials as recognized by the student's State/Territory

In order for a student to register, they must submit a letter from the Statewide Interoperability Coordinator (SWIC) or State Administrative Agency (SAA) to the class registrar (via e-mail or fax), stating that the student candidate:

- Has successfully completed all COML course prerequisites
- Has successfully completed the All-Hazards Type III COML course
- Has an appropriately signed All-Hazards Type III COML Task Book
- Has appropriate instructor credentials in the candidate's home State/Territory
- Is recommended by the SWIC or SAA to be an instructor candidate
- Will be supported by the State/Territory to complete all instructor requirements, including serving as an adjunct instructor after successfully completing the COML TtT course

Upon completion of the COML TtT course, each instructor candidate must teach one All-Hazards Type III COML class by serving as an adjunct instructor with an OEC approved Instructor. Students will be evaluated by the OEC approved instructor using an Instructor Task Book.

Deliverables

- On-site workshops and meetings
- On-site user and/or trainer training

NECP Alignment | **Initiative 3.2, 5.1, 5.3, 7.2**

TRG-ICS: Communications Unit Integration into the National Incident Management System (NIMS)/Incident Command System (ICS) Workshop

Description

This service offering provides a training workshop focused on addressing communication-specific needs during an operational period and on the requirements for the communications unit planning process for subsequent operational periods. The Incident Command System (ICS) Workshop is designed to give an overview of the ICS for emergency response and support personnel tasked with implementing the NIMS/ICS principles, organization, and functions.

The workshop emphasizes establishing an organization that allows for interoperable communications among all levels of the organization. Students progress through a simulated incident and engage in the command and general staff meeting (strategy meeting), and tactics and plans meetings, develop an Incident Action Plan (IAP), and hand out the IAP while conducting an operational briefing. Students assume command, general staff, and unit leader positions and produce documentation required for each position. Students develop an understanding for command, plans, operations, logistics, and administrative cycles for each primary management function.

OEC/ICTAP provides a certified and experienced NIMS/ICS Workshop instructor to teach the course.

Deliverables

- On-site course delivery
- On-site workshops and meetings
- Presentation and supporting documents
- Document models and templates

Communications Operations Support

Exercises are an important tool to train for and practice mitigation, prevention, response, and recovery capabilities in a risk-free environment. Often, however, a key Target Capability such as Communications is either omitted from or only notionally included in exercise opportunities. To best approximate the true operational environment, exercises should thoroughly incorporate and evaluate available communications procedures, tools, and personnel into each multi-agency, multi-discipline, multi-jurisdictional training/testing opportunity. OEC/ICTAP has, therefore, developed a focused team of exercise and communications subject matter experts (SMEs) to assist urban areas, regions, States/Territories, Tribes, and Federal Departments/Agencies who have expertise with:

- Designing, conducting, and evaluating communications-focused public safety/service discussion-based and functional exercises
- Evaluating communications capabilities at full scale exercises
- Communications-specific exercise injects
- Special event communications pre-planning
- On-site assessment of operational procedures relating to communications

Urban areas, regions, States/Territories, Tribes, and Federal Departments/Agencies should incorporate interoperable communications into exercises in order to:

- Promote an increased awareness of regional communications interoperability capabilities
- Identify areas for measurable improvement in interoperable communications elements (that is, governance, standard operating procedures, technology, training and exercises, and usage)
- Achieve a shared understanding of existing communications interoperability strengths and gaps experienced by regional communication specialists, first responders, and public safety officials
- Build stronger relationships between regional public safety professionals, officials, and first responder that transcend agencies, jurisdictions, and disciplines

Operations Support technical assistance is categorized into the following discrete services. Urban areas, regions, States/Territories, Tribes, and Federal Departments/Agencies may request service offerings individually or in any combination. Each service offered here can also be requested in combination with services in other categories included in this catalog.

Communications Operations Support services include:

- OP-TTX: Communications-focused Tabletop Exercise (TTX)
- OP-EXTTX: Communications-focused Executive Tabletop Exercise (EX-TTX)
- OP-FE: Communications-focused Functional Exercise (FE)
- OP-FSE: Full Scale Exercise (FSE)
- OP-SPEV: Special Event/Pre-Event Planning Support
- OP-ASMT: Operational Communications Assessments

OP-TTX: Communications-Focused Tabletop Exercise (TTX)

Description

This service offering provides trained, qualified, and experienced Exercise Design Teams to collaborate with public safety and public service professionals in an urban area, region, State/Territory, Tribal, or Federal Department/Agency to design, facilitate, and evaluate a communications-focused tabletop exercise (TTX). This exercise is designed to be fully compliant with the Homeland Security Exercise and Evaluation Program (HSEEP) and is aligned with Emergency Support Function #2 (Communications) and the Target Capabilities List (TCL). Specifically, this TTX is a discussion-based exercise used to evaluate communications plans, policies, and procedures, and to assess the types of communications systems needed to guide the prevention of, response to, and recovery from a defined event custom tailored to the requesting area.

The TTX focuses on responders, supervisors, and communications specialists in the public safety/service community through an opportunity to discuss communications plans, assets, and personnel in a static environment. Players review and verbalize their ability to use regional communications assets in response to a large-scale incident scenario but the movement of personnel and equipment is simulated. A TTX is an excellent initial exercise for initiating multi-agency exercise relationships or reviewing regional policies or procedures such as a Tactical Interoperable Communications Plan or TICP and ideally should precede both functional and full-scale exercises.

OEC/ICTAP provides the requesting urban area, region, State/Territory, Tribe or Federal Department/Agency with a complete Exercise Design Team including a facilitator, data specialist, and evaluators. The facilitator is fully trained and certified to execute TTXs, is highly experienced in conducting discussion-based exercises, and possesses direct experience in public safety communications. Evaluators are public safety communications subject matter experts (SMEs) trained to identify successes and gaps revealed during the exercise. This Exercise Design Team partners directly with a local Exercise Planning Team to ensure that each exercise is designed specifically for the requesting urban area, region, State/Territory, Tribe, or Federal Department/Agency to meet its needs.

OEC/ICTAP presents the results of the TTX through an initial QuickLook presentation followed by a detailed and thorough After Action Report/Improvement Plan (AAR/IP) designed to document exercise best practices, gaps, and recommendations to resolve those gaps. This AAR/IP then allows the urban area, region, State/Territory, Tribe or Federal Department/Agency to further promote and measure progress toward resolving identified interoperable communications gaps through a Corrective Action Program (CAP). Finally, the requesting site receives a detailed Tabletop Exercise Manual that provides specific guidance for conducting additional communications-focused TTXs in the future.

Deliverables

- Initial and Final Planning Conference Briefings
- Situation Manuals (SITMANs)
- QuickLook Presentation
- Logistics Package (invitations, checklists, etc.)
- Exercise Presentations and Briefings
- After Action Report/Improvement Plan
- After Action Conference Presentation
- Tabletop Exercise Manual

NECP Alignment | **Initiative 3.1, 7.2**

OP-EXTTX: Communications-Focused Executive Tabletop Exercise (EX-TTX)

Description

This service offering provides trained, qualified, and experienced Exercise Design Teams to collaborate with public safety executives and elected officials in an urban area, region, State/Territory, Tribe, or Federal Department/Agency to design, facilitate, and evaluate a communications-focused executive tabletop exercise (EX-TTX) tailored to their unique needs.

Large-scale critical incidents can result in significant long-term physical, economic, social, political, psychological, and environmental implications to a region. To ensure an effective response to and recovery from these incidents, senior public safety executives require both the appropriate communications tools and adequate training in order to coordinate a multiagency cooperative response.

The EX-TTX is designed to be fully compliant with the Homeland Security Exercise and Evaluation Program (HSEEP) and is aligned with Emergency Support Function #2 (Communications) and the Target Capabilities List (TCL). Specifically, this discussion-based exercise covers ways to utilize interoperable communications policies, procedures, and technologies to:

- Maintain control during incidents
- Enhance situational awareness
- Properly function within the incident management process
- Provide policy inputs to the incident commander or unified command team
- Craft and deliver a cohesive incident message to the public

OEC/ICTAP provides the requesting urban area, region, State/Territory, Tribe, or Federal Department/Agency with a complete Exercise Design Team, including a facilitator, data specialist, and evaluators. The facilitator is fully trained and certified to execute EX-TTXs, is highly experienced in conducting discussion-based exercises, and possesses direct experience in public safety executive-level communications. Evaluators are public safety communications subject matter experts (SMEs) trained to identify successes and gaps revealed during the exercise.

OEC/ICTAP presents the results of the EX-TTX through an initial QuickLook presentation followed by a detailed and thorough After Action Report/Improvement Plan (AAR/IP) designed to document exercise best practices, gaps, and recommendations to resolve those gaps. This AAR/IP then allows the urban area, region, State/Territory, Tribe, or Federal Department/Agency to promote and measure progress toward resolving identified interoperable communications gaps through a Corrective Action Program (CAP). Finally, the requesting site receives a detailed Executive Tabletop Exercise Manual providing specific guidance on how to conduct future communications-focused EX-TTXs.

Deliverables

- Initial and Final Planning Conference Briefings
- After Action Report/Improvement Plan (AAR/IP)
- After Action Conference Presentation
- Executive Tabletop Exercise Manual
- Situation Manuals (SITMANs)
- Logistics Package
- Exercise Presentations and Briefings
- QuickLook Presentation

OP-FE: Communications-Focused Functional Exercise (FE)

Description

This service offering provides trained, qualified, and experienced Exercise Design Teams to collaborate with public safety and public service professionals in an urban area, region, State/Territory, Tribe, or Federal Department/Agency to design, facilitate, and evaluate a communications-focused Functional Exercise (FE). This exercise is designed to be fully compliant with the Homeland Security Exercise and Evaluation Program (HSEEP) and is aligned with Emergency Support Function #2 (Communications) and the Target Capabilities List (TCL).

The FE targets communications users in the public safety/service community through an opportunity to operationally exercise communications plans, assets, and personnel in a static environment. Players demonstrate their ability to use regional communications assets in response to a large-scale incident scenario, but the movement of personnel and equipment is simulated. An FE is an excellent follow-on exercise to a TTX and a perfect training lead-in to a Full Scale Exercise (FSE).

OEC/ICTAP provides the requesting urban area, region, State/Territory, Tribe, or Federal Department/Agency with a complete Exercise Design Team, including a Team Lead, data specialist, controllers, and evaluators. The Team Lead is fully trained and certified to execute FEs, is highly experienced in conducting operations-based exercises, and possesses direct experience in public safety communications. Controllers and evaluators are public safety communications subject matter experts (SMEs) trained to identify successes and gaps revealed during the exercise. OEC/ICTAP may request that the site provide additional controllers or evaluators, and OEC/ICTAP provides controller/evaluator training for all personnel involved. This Exercise Design Team partners directly with a local Exercise Planning Team to ensure that each exercise is designed specifically for the requesting urban area, region, State/Territory, Tribe, or Federal Department/Agency to meet its needs.

OEC/ICTAP presents the results of the FE through an initial QuickLook presentation followed by a detailed and thorough After Action Report/Improvement Plan (AAR/IP) designed to document exercise best practices, gaps, and recommendations to resolve those gaps. If the FE follows an OEC/ICTAP TTX, the AAR/IP will also assess progress made on gaps identified during the TTX process. This AAR/IP then allows the urban area, region, State/Territory, Tribe, or Federal Department/Agency to further promote and measure progress toward resolving identified interoperable communications gaps through a Corrective Action Program (CAP). Finally, the requesting site receives a detailed Functional Exercise Manual that provides specific guidance on how to conduct future communications-focused FEs.

Deliverables

- Initial, Mid-Term, and Final Planning Conference Briefings
- Exercise Evaluation Guidelines (EEGs)
- Functional Exercise Leave Behind Manual
- Controller/Evaluator Handbook (C/E Handbook)
- After Action Report/Improvement Plan (AAR/IP)
- Controller/Evaluator Training Briefings
- After Action Conference Presentation
- Master Scenario Events List (MSEL)
- QuickLook Presentation
- Logistics Package
- Exercise Presentations and Briefings
- Exercise Plan (EXPLAN)

NECP Alignment | **Initiative 7.2**

OP-FSE: Full-Scale Exercise (FSE)

Description

This service offering provides trained, qualified, and experienced public safety communications subject matter experts (SMEs) to collaborate with public safety and public service professionals in an urban area, region, State/Territory, Tribe or Federal Department/Agency to evaluate the area's communications capabilities during existing or planned Full Scale Exercises (FSEs).

FSEs are often large, multiagency, multidiscipline, multijurisdictional exercises designed to test many facets of emergency response and recovery operations. Although communication is one of several capabilities included in the response scenario, interoperable communications are frequently not an evaluation focus, and gaps in this area are often neglected in exercise reports.

At this time, OEC/ICTAP does not independently design or facilitate stand-alone communications-focused FSEs. However, this TA provides interoperable communications SMEs who possess various skill sets (that is, operations, engineering, or policies and procedures) to ensure the larger Exercise Planning Team's ability to evaluate all components of interoperable communications during the exercise and provide professional and detailed inputs. OEC/ICTAP Exercise Design SMEs will assist the local Exercise Planning Team during the FSE planning and development process to properly, and thoroughly, integrate interoperable communications components into the exercise itself. This planning assistance would include support tasks such as developing or enhancing appropriate exercise injects to trigger communications events, incorporating applicable communications performance measures, identifying regional assets for exercise play, documenting known communications challenges that could impact exercise play, and developing concise Exercise Evaluation Guides (EEGs). OEC/ICTAP will also provide evaluators during the FSE to focus specifically on assessing communications during the exercise.

OEC/ICTAP presents the results of the FSE by integrating its evaluation (designed to document exercise best practices, gaps, and recommendations to resolve those gaps) into the local After Action Report/Improvement Plan (AAR/IP). If the FSE follows an OEC/ICTAP TTX, EX-TTX, or FE, the AAR/IP will also attempt to document progress made on gaps identified during those processes. This AAR/IP then allows the urban area, region, State/Territory, Tribe, or Federal Department/Agency to further promote and measure progress toward resolving identified interoperable communications gaps through a Corrective Action Program (CAP).

Deliverables

- Initial, Mid-Term, and Final Planning Conference participation
- Communications Exercise Evaluation Guidelines (EEGs)
- After Action Report/Improvement Plan (AAR/IP) inputs
- After Action Conference Presentation inputs

NECP Alignment | **Initiative 3.1, 7.2**

OP-SPEV: Special Event/Pre-Event Planning Support

Description

This service offering provides experienced public safety operations/communications subject matter experts (SMEs) to collaborate with public safety professionals in an urban area, region, State/Territory, Tribe, or Federal Department/Agency during the planning and execution phases for planned special events.

Planned special events such as national/international sporting events, civic festivals, large conventions, or political summits can involve dozens of public safety agencies, across several disciplines and jurisdictions, and present significant challenges to establishing and maintaining appropriate interoperable communications. Large-scale planned events, therefore, require substantial operational planning and preparation to appropriately coordinate all public safety participants, to ensure that the event proceeds smoothly, and to prepare to respond to an involved or simultaneous incident.

Selected SMEs possess various skill sets (that is, operations, engineering, or policies and procedures) to ensure the team's ability to advise on all components of interoperable communications prior to or during the event. Through this service offering, OEC/ICTAP SMEs can work directly with the event planning team to provide inputs to event/incident action plans, assist with developing communications plans, identify pre-event training opportunities, and/or advise on methods to overcome identified communications challenges.

Deliverables

- Planning Conference participation
- Event/Incident Action Plan inputs
- Communications Plan inputs
- Other assessments, on request

OP-ASMT: Operational Communications Assessments

Description

This service offering provides experienced public safety operations/communications subject matter experts (SMEs) to conduct specific assessments of communications capabilities, assets, or procedures.

All operable and interoperable communications must be efficient and intuitive in order to be effective tools for public safety responders and communications specialists. Operational communications assessments, therefore, ensure that proposed or in-place technologies, plans, and procedures enhance and support operations. In support of these needs, OEC employs experienced operational SMEs dedicated to assessing emerging tools in the requesting urban area's, region's, State/Territory's, Tribe's, and/or Federal Departments/Agencies specific environment to explore the likelihood of a responder's or dispatcher's success in using those tools in an event or incident.

These assessments are tailored directly to the requestor's individual needs and can include items such as:

- Field assessments through ride-alongs with responders
- Dispatch center and Public Safety Answering Point (PSAP) assessments
- Specific mobile equipment (for example, gateway devices, mobile communications vehicles, etc.) deployment assessments
- Tactical/emergency applications of routine interoperable communications solutions (e.g. shared channels for multi-agency vehicle pursuits, etc.)
- Tactical assessments of interoperable assets for specialty response teams

OEC/ICTAP presents the results of each Operational Assessment through an individual Operational Assessment Report. The final deliverables are tailored to meet the requirements of each individual request.

Deliverable

- Operational Assessment Report

Communications Systems Engineering Support

For any interoperable solution to be accepted and used by the public safety community, that technology must be robust, reliable, intuitive, and trusted. Interoperable communications, therefore, serve as the critical backbone of the region's ability to respond to emergencies and must be deployed and maintained at full operational readiness. OEC/ICTAP Communications Systems Engineering technical assistance offers objective third-party services to help public safety radio administrators enhance their Land Mobile Radio (LMR) system networks and make informed interoperability decisions. These services can help urban areas, regions, States/Territories, Tribes, and Federal Departments/Agencies develop confidence in their chosen interoperability solutions, use those solutions more effectively across their respective areas, and improve the technological capacity to support day-to-day and large-scale interoperable communications needs.

Communications Systems Engineering technical assistance covers all phases of a communication system's life cycle – defining requirements, identifying solutions, implementing the system, and supporting existing systems. These services include diverse offerings such as system analyses, Project 25 (P25) standards information sharing, system performance analysis (for example, drive testing and coverage plots), hands-on equipment training, and others as requested.

OEC/ICTAP's Communications Systems Engineers possess specific expertise in areas such as system configuration options, RF coverage, LMR standards, microwave technologies, data interoperability, broadband wireless, national spectrum requirements, etc. These engineers are also available to advise and participate in additional service categories such as exercise observation and analysis, communications plan development, and communications unit training.

Communications Systems Engineering Support technical assistance is categorized into the following discrete services. Urban areas, regions, States/Territories and Tribes may request service offerings individually or in any combination of the below. Each service offered here can also be requested in combination with services in other categories included in this catalog.

Communications Systems Engineering Support services include:

- ENG-SYS: LMR System Analysis
- ENG-MIG: LMR System Migration
- ENG-COV: RF Prediction Coverage Maps
- ENG-DT: RF Coverage Drive Test Measurements
- ENG-P25: P25 Information Sharing
- ENG-P25W: P25 Land Mobile Radio Workshops
- ENG-MW: Microwave Design Analysis
- ENG-AG: Audio Gateway Information and Training
- ENG-SITEID: Systems and Engineering — Site Identification and Sharing Agreement
- ENG-SHARE: Systems and Engineering — Shared Resource Analysis and Coordination
- ENG-DS: Data Systems Interoperability
- ENG-PKG1: Package #1 LMR System Analysis
- ENG-PKG2: Package #2 RF Coverage Analysis

ENG-SYS: LMR System Analysis

Description

This service offering provides trained, qualified, and experienced OEC/ICTAP Communications Systems Engineers to review and analyze proposed system design documentation such as Requests for Proposals (RFPs), proposals, and Acceptance Test Plans (ATPs) to determine whether proposed system purchases, changes, or upgrades truly meet the needs of the urban area, region, State/Territory, Tribe, or Federal Department/Agency users.

Proper Land Mobile Radio (LMR) system design is critical to ensure that the Nation's first responders have reliable and robust communications. OEC/ICTAP Systems Engineers act as an independent third party to ensure that final reports are objective and vendor-neutral.

OEC/ICTAP presents the results of the LMR System Analysis through a detailed and thorough Assessment Report designed to document identified discrepancies between user requirements and existing or proposed system capabilities. The Assessment Report also includes professional recommendations designed to resolve those gaps, improve technological interoperable communications functionality, and enhance regional interoperable communications capabilities. Analysis topics in this assessment may include interoperability, wide area communications capabilities, coverage, capacity, P25 features, and others.

In some cases, radio system planners need only a high-level analysis on existing or proposed LMR system documentation. Urban areas, regions, States/Territories and Tribes may therefore request a QuickLook LMR System Analysis intended to provide a faster turnaround time through a less in-depth Assessment Report. As such, the content and depth of the final Assessment Report is determined by user needs and is tailored to the requirements of each individual request.

Deliverables

- Site collaboration presentations and discussions
- Final Assessment Report
- Final Assessment Presentation, on request

ENG-MIG: LMR System Migration

Description

This service offering assists urban areas, region, State/Territory, Tribal, and Federal Department/Agency users to implement a migration strategy from a legacy Land Mobile Radio (LMR) system to a new P25 standards based system. OEC/ICTAP Communications Systems Engineers review and analyze current system utilization, including:

- Jurisdictional boundaries
- Essential talkgroups
- Frequencies
- Coverage boundaries
- Tower locations
- Subscriber radio capabilities
- Other related parameters

As a second phase to this effort, OEC/ICTAP Communications Systems Engineers review and analyze new system documentation or plans in order to better provide recommendations for a switch-over.

The third phase of this service includes recommendations on a migration plan that utilizes information gathered in Phases 1 and 2. Phase 3 includes consultations and discussions with the system users, administrators, equipment providers, and installers to establish a switch-over strategy.

There are many factors to be taken into account within a migration plan. Some factors to consider are:

- Utilization of a new frequency band
- Frequency availability during new system testing and transition
- System down-time acceptability
- Timeline constraints
- Radio programming logistics

Consideration also needs to be given to whether multiple subscriber radios will need to be employed during the migration period. User training is an important aspect and can include: new equipment operation training, talkgroup structure training, coverage area training, and intermediate and long-term usage procedures. If some users migrate prior to others, temporary interoperability solutions may have to be employed in order to retain communications between all users.

Deliverables

- Site collaboration presentations, documents, or discussions
- System Migration Report

NECP Alignment | **Initiative 4.2**

ENG-COV: RF Coverage Prediction Maps

Description

This service offering offers an assessment of RF system coverage (for example, coverage footprints) for an urban area, region, State/Territory, Tribe, or Federal Department/Agency.

Existing Land Mobile Radio (LMR) systems may not provide adequate RF coverage for their entire operational area. Coverage gaps negatively impact the ability of public safety professionals to communicate and may significantly hinder their response. RF coverage prediction maps, therefore, allow Radio System Administrators to visualize RF coverage, to baseline system performance prior to any changes or upgrades, to identify potential for co-site RF interference, and/or to determine where gaps occur in both existing and proposed radio networks.

Communications Systems Engineers can provide RF coverage prediction maps in various forms including traditional static images and dynamic, interactive graphical representations using Google Earth®. These RF coverage prediction maps can be used as a tool to plan appropriately for:

- Current system upgrades (for example, new tower locations, new antenna locations, and frequency band changes)
- A catastrophic infrastructure loss (for example, collapsed tower, equipment power loss, and damaged repeater)
- System migration by providing an independent assessment of proposed system coverage

Urban areas, regions, States/Territories and Tribes may request RF coverage prediction maps in various forms, based on their reporting needs. The content and depth of the final deliverables are determined by user needs and are tailored to the requirements of each individual request.

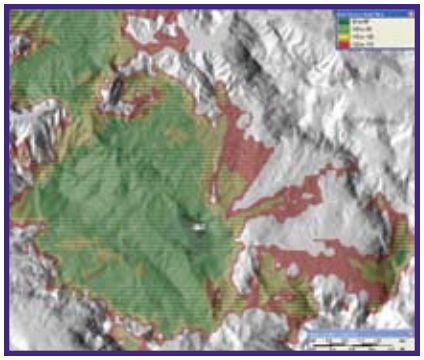
OEC/ICTAP RF engineers utilize a frequency management tool (FMT) to identify appropriate frequencies from FCC data and assess the geographical impact on coverage of them. Frequencies and tower sites are selected from the FCC database and displayed on a geographical map using Google Maps®. A three-dimensional display is then provided by using Google Earth®. This allows for a much more useful assessment of the type of terrain so that coverage map models can be adjusted to more meaningful parameters.

Deliverables

Varied based on requestor's need and may include:

- Images in Microsoft PowerPoint® presentations
- OEC/ICTAP RF Coverage Analysis Report
- Google Earth® files

ENG-DT: RF Coverage Drive Test Measurements



Description

In this service offering, OEC/ICTAP Communications Systems engineers collect measurements of system strength in order to assess the true performance of a given radio system.

Existing Land Mobile Radio (LMR) systems are typically designed or characterized by prediction models and software. This methodology alone may not provide an adequate level of prediction accuracy upon which to base important region-wide radio system decisions. However, using field strength measurements from a user's existing system provides real-world data to calibrate prediction software applications, thereby improving accuracy.

RF Coverage Drive Tests can be used to define and refine system coverage requirements, provide information for system implementation, and enhance existing system operations over the course of the communication system life cycle. For existing systems, Drive Test data can be used to supplement baseline coverage studies. For new system implementations, a Coverage Acceptance Test (CAT) is performed by the installer to determine if the installed system meets the design requirements. OEC/ICTAP Drive Test data can be used as a supplement to this CAT and provides an explanation of the data analysis methodology used.

Urban areas, regions, States/Territories and Tribes receive OEC/ICTAP Drive Test data in various forms, based on their reporting needs. The final deliverables are tailored to meet the requirements of each individual request.

Deliverables

- Measurement data (Microsoft Excel®, MapPoint®, Google Earth®)
- OEC/ICTAP Coverage Acceptance Test Report

ENG-P25: P25 Information Sharing

Description

This service offering provides information designed to enhance the requesting urban area, region, States/Territory's, Tribe's, and/or Federal Departments/Agency's understanding and application of P25 technology standards in their respective areas.

The P25 radio standards provide a common protocol to communicate using public safety radio systems. The P25 standards include many features and interfaces with varying levels of completion. The P25 standard is constantly maturing and provides more capability and interoperability as it is developed. It becomes increasingly important for radio system managers to become aware of the latest defined P25 features, capabilities, and products available today. P25 Information Sharing includes specific site guidance on which features to select when ordering P25 equipment.

OEC/ICTAP Communications Systems Engineers interact directly with the requesting site to provide all requested P25 information. This interaction may take the form of an on-site workshop (see ENG-P25W: P25 Land Mobile Radio Workshops), teleconference, and/or sharing P25-related tools and documents such as the OEC/ICTAP P25 Features Matrix. The OEC/ICTAP P25 Features Matrix is a tool that gives a snapshot of the features available in the standard today. System administrators can use this tool to help determine which features to include in future system upgrades or system migrations.

Urban areas, regions, States/Territories, Tribes, and/or Federal Departments/Agencies can also request P25 technical notes or report appendices in combination with other services offered in this catalog.

Deliverables

Varied based on request need and may include:

- The OEC/ICTAP P25 Features Matrix
- On-site information sharing workshop
- Presentations at regional Technology Workshops
- P25 technical note or appendix to report (that is, definitions and interfaces)
- Meetings and discussions with involved agencies
- Other assessments, on request

ENG-P25W: P25 Land Mobile Radio Workshops

Description

This service offering provides progressive levels of instruction about P25 standards. Modules 1-5 can be provided on-site or at the OEC/ICTAP Public Safety Technology Lab located at SPAWAR Systems Center Pacific in San Diego, CA. The P25 Land Mobile Radio (LMR) Workshop Series consists of five modules:

Module 1 — Project 25 Overview. A high-level overview providing a basic understanding of the P25 LMR system for both technical and non-technical attendees. P25 details, including the current status and future direction of the P25 Standards development, are covered. Duration: 4 hours.

Module 2 — Project 25 Features and Services. A more in-depth module aimed at the LMR system decision maker, manager, administrator, and/or users based on the OEC/ICTAP P25 Features Matrix. It is designed to help maximize system operability and interoperability between agencies. Duration: 4 hours.

Module 3 — Project 25 ISSI Status. A short course on the P25 Inter-RF Subsystems Interface (ISSI) to educate attendees on the status of this key standard for LMR inter-system interoperability. The defined capabilities and implementation road map are covered and will help system administrators plan for its deployment in their systems. OEC/ICTAP suggests offering this module in conjunction with the VOIP and ROIP module. Duration: 1 hour.

Module 4 — VOIP and ROIP. A short course to help students understand Voice over Internet Protocol (VOIP) and Radio over Internet Protocol (ROIP) for public safety as an interoperability solution. OEC/ICTAP suggests offering this module in conjunction with the P25 ISSI Status module. Duration: 1 hour.

Module 5 — Introduction to Radiowave Propagation for Public Safety. An advanced course that guides the attendee through applicable radiowave propagation theory, prediction/planning, and coverage measurements. This module is geared toward the system planner/designer to enable a confident evaluation of manufacturer's designs and Acceptance Test Planning procedures. This module should also help participants avoid common mistakes in proposed design improvements for fill-in and system expansion, and it includes hands-on experience with an RF planning tool. Duration: 8 hours.

Modules can accommodate 20 students for modules 1- 4 and preferably no more than 6 to 8 for Module 5.

Deliverables

- Module presentations
- Reference materials

ENG-MW: Microwave Design Analysis

Description

This service offering provides experienced OEC/ICTAP Communications Systems Engineers to review and analyze proposed microwave design documentation to determine if the specifications meet the needs of the urban area, region, State/Territory, Tribe, or Federal Department/Agency requestor.

System backbones provide reliable and robust high-speed voice and data traffic between geographically separate communications sites. Proper backbone design is critical in order to maintain the Nation's public safety Land Mobile Radio (LMR) systems. Microwave links are a common method used to provide these backbone communications.

The OEC/ICTAP Microwave Design Analysis results in an objective third-party report that may be used to assist system managers in decision making, as an initial design to be included in a Request for Proposal (RFP), as a supplementary information source in LMR system proposals, or for general equipment information.

OEC/ICTAP presents the results of the Microwave Design Analysis through an individual Assessment Report or in combination with other OEC/ICTAP engineering services. The Assessment Report may include a microwave system design, a microwave path analysis, and recommendations on equipment selection. The final deliverables are tailored to meet the requirements of each individual request.

Deliverables

Microwave Assessment Report, including:

- Design review
- Microwave path analysis
- Equipment recommendations

ENG-AG: Audio Gateway Information and Training

Description

This service offering provides different levels of understanding on gateway (that is, audio bridge) functionality and operations. Participation in all three modules should prepare urban area, regional, State/Territory, Tribal, or Federal Department/Agency personnel for activation and deactivation of available gateways. The Gateway Training Workshop can be given on-site using live local equipment or at the OEC/ICTAP Public Safety Technology Lab located at SPAWAR Systems Center Pacific in San Diego, CA. The Gateway Training Workshop consists of three modules:

Module 1 — Gateway Overview. A high-level overview targeted for anyone requiring a basic understanding of gateway functionality.

Module 2 — Advanced Gateway Operation. Targeted for personnel interested in a more advanced/detailed understanding of gateway operations; i.e., Communications Unit Leaders (COML), Communication Coordinators (COMC), Communications Technicians (COMT), and agency communication specialists. This includes use-specific issues such as co-site RF interference.

Module 3 — Gateway Hands-on Configuration. Equipment specific, targeted for gateway installers, maintenance technicians, and specialists.

Session lectures, discussions, and practical exercises are focused on the site-specific gateways and are intended to prepare personnel in the region to quickly activate and deactivate their own equipment. The total workshop is approximately 6 to 8 hours in length. Each module is intended to build on previous module(s). The training session can accommodate approximately 20 students for modules 1 and 2 but no more than 10 for module 3.

Deliverables

- Workshop training presentations (also left for reference on CD)
- Available gateway firmware updates
- Simulation software
- Workshop training materials/handouts and reference materials

NEW ENG-SITEID: Systems and Engineering — Site Identification and Sharing Agreement

Description

This service offering is designed to determine the feasibility of potential sites to support emergency communications requirements. If the site can support such requirements, this offering can also help agencies to establish an agreement to share the site with current tenants.

OEC/ICTAP engineers survey the site to gather initial data, validate previously gathered data, or create an updated baseline to determine the site's feasibility. The survey may include the following activities:

- Collection and documentation of detailed information to support network design and engineering
- Analysis of the condition of each communications site
- Collection of information on existing communications shelters
- Development of a detailed list of existing communications equipment located and installed in the shelter
- Production of tower and shelter elevation drawings
- Analysis of tower loading capabilities
- Assessment of physical site security
- Development and documentation of approaches for physical security

OEC/ICTAP provides templates for defining each participant's responsibilities and commitments concerning the use of the site. OEC/ICTAP support personnel provide instruction and guidance on the development of a site sharing agreement between the department/agency and all other site participants. OEC staff can also help the client determine the representatives who should be parties to the sharing agreement.

Templates and samples for all agreement documents include definitions of the parties, authority, background, purpose, responsibilities, reporting and documentation, points of contact, modification, termination, and approvals. OEC/ICTAP can offer recommendations on how to structure the various types of documents and can identify questions and issues that should be addressed when generating content for each of the sections within the various documents.

Deliverables

- List of existing communications equipment at site shelters
- Tower and shelter elevation drawings
- Tower loading analyses
- Assessment of physical site security
- Development and documentation of approaches for physical security
- Sharing agreement templates

NEW

ENG-SHARE: Systems and Engineering — Shared Resource Analysis and Coordination

Description

This service offering is designed to determine the feasibility of Federal-to-Federal, Federal-to-State, or Federal-to-regional resource sharing in a given geographic area. OEC engineers and SMEs evaluate requests for shared resources and infrastructure between Federal-to-Federal systems and Federal-to-State, local, regional, tribal, and territorial agencies to determine the benefits to the departments/agencies. OEC staff will gather the department/agency requirements and prepare the documentation to coordinate the requirements with the partnership agencies. To support those interested in developing sharing agreements, OEC SME and engineering services can:

- Coordinate and facilitate meetings with departments/agencies to determine requirements (for example, interoperability, coverage, subscriber units, or frequency/spectrum)
- Coordinate with participating partners
- Facilitate meetings and agreements with State and regional partners
- Provide MOU and agreement templates
- Conduct surveys of proposed sites to determine suitability

OEC engineers make recommendations about department/agency equipment purchase and installation requirements, which allow for non-vendor-specific competitive bidding. They can provide P25 talkgroups analysis and develop talkgroups to support the departments'/agencies' current and future needs. Acceptance test criteria can be reviewed to ensure that proper system functions are provided. SMEs can attend the acceptance testing to ensure that system requirements are met.

SMEs will provide the templates for the MOUs covering system/site sharing and the ownership/use of frequencies and equipment requirements. They can assist in analyzing frequencies to ensure that sufficient spectrum is available to support the Federal department/agency and provide State, local, regional, Tribal, and territorial interoperability.

Deliverables

- Meeting to determine requirements
- Federal Statement of Requirements (SoR)
- Site survey evaluations
- Equipment lists
- Equipment specification requirements
- Templates for MOUs
- Populated MOUs
- Frequency and spectrum evaluation and support
- Acceptance test criteria
- Acceptance testing attendance and evaluation

NEW ENG-DS: Data Systems Interoperability

Description

As LMR voice systems become more robust, especially as the migration to P25 standard-based equipment becomes more substantial, an increasing number of State and local emergency management agencies are turning attention to data systems interoperability as their next area of focus.

This service offering provides an assessment of current data systems capabilities, identification of future needs, identification of options to meet these needs, and assistance with the development of requirements documents. For example, user requirements may include assessments of low bandwidth mobile data terminals, high bandwidth video/graphics and data files, and medium bandwidth data transfers between Emergency Operation Centers.

Options for consideration include low data rate mobile data terminals available from various voice vendors, commercial services, stand-alone data systems, and various off-the-shelf technologies (for example, 4.9 GHz, WiFi). Issues to be addressed include migration options, own or lease, data and voice integration, and operating band. OEC/ICTAP can also provide assistance with review of proposals and acceptance testing of selected systems.

Deliverables

- Site collaboration presentations and discussions
- Final Assessment Report
- Final Assessment Presentation, on request

COMMUNICATIONS SYSTEMS ENGINEERING PACKAGES

The two Communications Systems Engineering packages described below are combinations of the Communications Systems Engineering services offered individually above. Urban areas, regions, States/Territories, Tribes, and Federal Departments/Agencies may, request the Engineering services individually or collectively. These packages may also be requested alone or in combination with service offerings available from other categories in this catalog.

ENG-PKG1: Package #1 LMR System Analysis

This technical assistance package is designed to analyze either a current or proposed system using a variety of methods. As part of this process, Communications Systems Engineers initially review system documentation for completeness and traceability to requirements documents or procurement specifications. Second, Engineers perform an RF coverage study to validate proposed coverage performance. Third, Engineers conduct a microwave design and path analysis to analyze system links. Finally, the requesting urban area, region, State/Territory or Tribe receives up-to-date information regarding the P25 technology standard.

This package comprises the following individually offered services (detailed above):

- ENG-SYS: LMR System Analysis
- ENG-COV: RF Coverage Prediction Maps
- ENG-MW: Microwave Design Analysis
- ENG-P25: P25 Information Sharing

ENG-PKG2: Package #2 RF Coverage Analysis

This package comprises a two-phase approach to analyze RF coverage for a specific radio system. In the first phase, Communications Systems Engineers collect field strength measurements in the service area to characterize local propagation parameters. The second phase uses the measured data to calibrate OEC/ICTAP's prediction tools, producing tailored RF Coverage Prediction Maps.

This package comprises the following individually offered services (detailed above):

- ENG-DT: RF Coverage Drive Test Measurements
- ENG-COV: RF Coverage Prediction Maps
- Communications Systems Engineering Support

Tactical Communications Enhancement Support

Tactical Interoperable Communications Plans (TICPs) are designed to allow a site (that is, an urban area, county, region, State/Territory, Tribe, or Federal Department/Agency) to document interoperable communications governance structures, technology assets, and usage policies and procedures. First responders can use a TICP to clearly define the breadth and scope of interoperable assets available in the area, how those assets are shared and their use prioritized, and the steps individual agencies should follow to request, activate, use, and deactivate each asset.

Completed TICPs were required for all 2005 Urban Area Security Initiative (UASI) sites and are encouraged for newly designated UASI (and non-UASI) cities, counties, multicounty regions, Tribes, and States/Territories. This offering may be requested for purposes of reviewing and/or revising TICPs or supporting development of new TICPs.

Tactical Communications Enhancement Support services include:

- TIC-WKSP: Tactical Interoperable Communications Plan (TICP) Workshop
- TIC-PIW: Tactical Interoperable Communications Plan Implementation Workshop (TICPIW)
- TIC-FOG: Interoperability Field Operations Guide
- TIC-COM: Communications Plan Analysis/Event Communications Plan Analysis
- TIC-PKG: Tactical Communications Enhancements Package

TIC-WKSP: Tactical Interoperable Communications Plan (TICP) Workshop

Description

This service offering provides an experienced facilitator, data specialist, and communications SMEs to coordinate and execute a 2-day workshop to develop a new Tactical Interoperable Communications Plan (TICP), or update an existing TICP, for an urban area, region, Tribe, or State/Territory.

Developing a complete, accurate, and usable TICP requires the collaborative efforts and inputs of the public safety/service organizations in the target area. In order to document the input of all relevant stakeholders and develop the TICP in the most efficient and effective manner, OEC/ICTAP provides the requesting area with a list of the information needed for the plan prior to the workshop. The requesting area also receives a copy of the plan template that the group will populate during the workshop.

The requesting area working group (that is, workshop attendees) should consist of communications and operational representatives from multiple area agencies and jurisdictions across all public safety/service disciplines, including non-governmental organizations, volunteers, and tribal entities. The working group should mirror the responders and support personnel needed for a major incident in the area. Suggested participants would include, but are not limited to:

- Law Enforcement, Fire, and Emergency Medical Service (EMS) communication specialists
- Law Enforcement, Fire, and EMS incident management staff
- Communication Coordinators and supervisors
- Communications Unit Leaders
- Incident Communication Center Managers
- Radio operators
- Technical Specialists

The workshop will allow participants to discuss and document the area's existing governance structures, technology assets, and policies/procedures related to interoperable communications during events ranging from day-to-day operations through large-scale critical incidents. In collaboration with site's attendees, OEC/ICTAP Data Specialists will populate the TICP template during the workshop with the information discussed and agreed to among the attendees. Examples from other areas can be provided as necessary to help requesters apply interoperable communications best practices and lessons learned from other areas with similar situations to their own.

Deliverables

- On-site workshop facilitation
- Document models and templates
- Populated TICP

NECP Alignment | **Initiative 1.3, 3.1, 7.2**

TIC-PIW: Tactical Interoperable Communications Plan Implementation Workshop (TICPIW)

Description

This service offering provides a 1-day (6 to 8 hours) Tactical Interoperable Communications Plan (TICP) Implementation Workshop (TICPIW) targeted to urban area, regional, Tribal, and/or State/Territorial cross-disciplinary responders and support personnel.

Once developed and approved, the TICP must be disseminated to all stakeholder agencies. Ensuring that communications users are knowledgeable about the plan and able to implement its components immediately increases the area's ability to maintain appropriate and effective interoperable communications during an event or incident of any size or scope.

Sessions, lectures, discussions, and exercises are focused on the area's TICP, and are intended to prepare emergency response and communications personnel to execute interoperable communications during events or incidents. OEC/ICTAP provides a trained, qualified, and experienced facilitator to familiarize responders and support personnel with their TICP and how to use their TICP as a tool to develop a communications plan. The TICPIW includes hands-on exercises using local scenarios, personnel, equipment, and communication assets, and can be tailored to meet specific audience requirements, on request.

OEC/ICTAP recommends inviting locally available urban area, regional, Tribal, State/Territory, and Federal agency personnel to attend the workshop. Suggested participants would include, but are not limited to:

- Law Enforcement, Fire, and Emergency Medical Service (EMS) communication specialists
- Law Enforcement, Fire, and EMS incident management staff
- Communication Coordinators and supervisors
- Communications Unit Leaders
- Incident Communication Center Managers
- Radio operators
- Technical Specialists
- Regional emergency managers
- Personnel identified to respond to a Type 1 or 2 Incident of National Significance

Deliverables

- On-site workshop presentation
- TICPIW reference materials
- Incident response paperwork and templates (for example, ICS Communications forms, etc.)

NECP Alignment | **Initiative 1.3**

NEW

TIC-FOG: Interoperability Field Operations Guide (IFOG) Development

Description

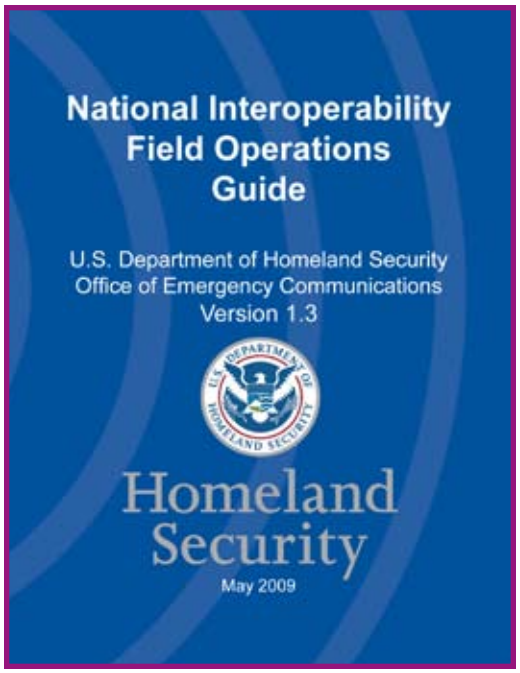
This service offering provides Interoperability Field Operations Guides (IFOG) for those urban areas, regions, Tribes, and/or States/Territories having an approved Tactical Interoperable Communications Plan (TICP). Based on the popular OEC National Interoperability Field Operations Guide (NIFOG), the regional IFOG is a compendium of TICP reference material for use by emergency response and communications personnel responsible for establishing and maintaining interoperable communications during events or incidents. The regional IFOG will be similarly packaged as a pocket-sized, spiral bound quick reference guide that can be carried by radio operators and technicians at all times.

OEC/ICTAP will provide a SME and support staff to meet with site officials to determine their approach and goals for their IFOG and to set up a process to update and to verify the information in their current TICP. Once the site has completed its review, OEC will reformat and condense the operationally relevant information from the TICP to develop the IFOG. The IFOG will contain:

- Regional maps
- Agency / Communications Center POC information
- Radio cache request information
- Regional channel data
- Gateway SOPs
- Technical support contacts
- Amateur radio operator information
- Communications Unit Personnel

The FOG-DEV offering will also provide general information from the NIFOG, and pertinent TICP reference materials.

OEC will provide the site a copy of the "draft" IFOG for their review and comment and will incorporate their comments prior to finalizing the IFOG.



Deliverables

- Draft IFOG template and instructions for site review
- Printer ready regional IFOG

NECP Alignment | **Initiative 1.3, 3.1**

NEW

TIC-COM: Planning — Communications Plan Analysis/Event Communications Plan Analysis

Description

This service offering identifies gaps in existing communications plans and/or Federal Annex K documents (Annex K is the primary document for publishing communications system guidance) and ensures that best practices and lessons learned are integrated into each planning document. It also ensures that communications policy is consistent across Urban Areas, regions, States/Territories, Tribes and/or Federal Department/Agency communications plans.

The Event Communications Plan Analysis service offering evaluates planning documents for a National Security Event, disaster response, or a special public event with a high security profile. This analysis will provide recommendations for interagency communications plans that specify operable and interoperable communications processes and procedures.

OEC/ICTAP SMEs leverage their skill sets (in areas such as operations, engineering, and policy) to ensure that communications planning documents are developed and implemented within the context of operational reality and mission requirements (such as response and recovery, law enforcement, and mutual aid), reducing overall operational risk. Working from multiple perspectives ensures that a comprehensive approach is consistently applied to all communications planning documents, thereby offering the responding departments/agencies a common expectation for voice and data communications.

Deliverables

- Recommended revisions to Communications Plans and Annex K
- Inputs to Communications Plans/Channel Plans
- Inputs to Event Communications Plans/Channel Plans
- Workshops and meetings for Communications Plan development

TACTICAL COMMUNICATIONS ENHANCEMENT PACKAGE

The technical assistance package detailed below is a combination of Communications Operations Support and Tactical Interoperable Communications Plans (TICP) Support services offered individually above. Urban areas, regions, Tribes, and States/Territories may, therefore, request TICP services individually or collectively. This package may also be requested alone or in combination with service offerings offered under other categories in this catalog.

TIC-PKG: Tactical Communications Enhancement Package

This Tactical Communications Enhancement package described below is designed to develop, disseminate, train, and exercise an urban area, regional, Tribal, and/or State/Territory TICP. First, OEC/ICTAP TICP SMEs collaborate with local response entities to develop the area's TICP. Next, area personnel attend a TICP Implementation Workshop to receive training on the use and applications of their plan. Finally, OEC/ICTAP Exercise Design SMEs design, facilitate, and evaluate a tabletop exercise (TTX), Executive TTX (EX-TTX), and Functional Exercise (FE) for the area focused on the assets, policies, and procedures documented in the TICP.

This package comprises the following individually offered services (detailed above):

- TIC-WKSP: TICP Workshop
- TIC-PIW: TICP Implementation Workshop (TICPIW)
- TIC-FOG: Interoperability Field Operations Guide (IFOG) Development
- OP-TTX: Communications-focused Tabletop Exercise
- OP-EXTTX: Communications-focused Executive Tabletop Exercise
- OP-FE: Communications-focused Functional Exercise.

Each exercise will assess solutions to previously identified gaps as well as identify new gaps. The TICP can, therefore, be revised between the exercises to reflect changes in policies, procedures, or equipment. OEC/ICTAP can also provide subject matter experts to advise on and evaluate the application of the TICP during a locally developed Full-scale Exercise following this package series, on request.

Regional Communications Enhancement Support

The Regional Interoperable Communications Plans (RICP) is a strategic plan that aligns the National Emergency Communications Plan (NECP), Statewide Communications Interoperable Plan (SCIP) National Response Framework; National Incident Management System (NIMS); National Preparedness Guidelines; Target Capabilities List with local, region, and state communication requirements.

Regional Communications Enhancement Support services include:

- RIC-WKSP: Regional Interoperable Communications Plan (RICP) Workshop
- RICFOG-WKSP: Regional Interoperable Field Operations Guide (RIFOG) Workshop
- RIC-PKG: Regional Communications Enhancement Package

NEW

RIC-WKSP: Regional Interoperable Communications Plan (RICP) Workshop

Description

This Technical Assistance service provides an experienced facilitator, data specialist, and communications subject matter expert (SME) to coordinate and execute a 2-day workshop to develop a RICP based upon a regional needs assessment of communication assets to:

- Establish a regional vision for current and future communication assets
- Identify and develop a migration plan for current and future funding sources
- Provide recommendations to the state from local stakeholders to improve their regional communication capabilities during the migration process.

Developing a complete, accurate, and usable RICP requires the collaborative efforts and inputs of the local public safety professionals in the region. In order to document the input of all relevant stakeholders and develop the RICP in the most efficient and effective manner the RICP creates a regional focus group to review current and future requirements and develop a communication migration plan that aligns with the SCIP. The focus group will be able to review, discuss and make adjustments to the migration plan based on available funding and accomplishments as you move towards your goal and objectives. An advantage of the RICP is the codifying of migration priorities prior to the issuance of grants from local stakeholders making it easy to respond to the short timeframes of some grant requests.

ICTAP provides a copy of the RICP template and guidance document that the working group will populate during the workshop. Workshops can be organized to accommodate more than one region per workshop. During the workshop, an ICTAP Data Specialist will populate the RICP template, in view of participants, with the information discussed during the workshop. Examples from other areas can be provided to help requesters apply communication best practices and lessons learned from other areas with similar situations to their own.

The requesting region working group (i.e., workshop attendees) should consist of communications and operational representatives from multiple area agencies and jurisdictions across all public safety/service disciplines, including non-governmental organizations, volunteers and tribal entities. The working group should mirror the responders and support personnel needed for a major incident or planned event in the region.

Deliverables

- On-site workshop facilitation
- Document models and templates
- Populated RIC Plan

NECP Alignment | **Initiative 1.3, 3.1, 7.2**

NEW

RIFOG-WKSP: Regional Interoperable Field Operations Guide (RIFOG) Workshop

Description

This technical assistance service provides a 1-day Regional Interoperable Channel Plan workshop and will populate the pocket sized RIFOG for use during emergencies and planned events.

The workshop will focus on the region's interoperable channels and communication assets and is intended to prepare emergency response and communications personnel to re-establish operability or execute interoperable communications during planned events and/or major incidents within their region. OEC/ICTAP provides a trained, qualified, and experienced facilitator to familiarize responders and support personnel with their RIFOG and how to use their RIFOG as a tool to develop a communications plan.

OEC/ICTAP recommends inviting locally available urban area, regional, Tribal, State/Territory, and Federal agency personnel to attend the workshop. Suggested participants would include, but are not limited to:

- Law Enforcement, Fire, and Emergency Medical Service (EMS) communication specialists
- Law Enforcement, Fire, and EMS incident management staff
- Communication Coordinators and supervisors
- Communications Unit Leaders
- Incident Communication Center Managers
- Radio operators
- Technical Specialists
- Regional emergency managers
- Personnel identified to respond to a Type 1 or 2 Incident of National Significance

Deliverables

- On-site workshop presentation
- RICFOG template

NECP Alignment | **Initiative 1.3, 3.1**

REGIONAL COMMUNICATIONS ENHANCEMENT PACKAGE

The technical assistance package detailed below is a combination of the Regional Interoperable Communications Plan (RICP) workshop and the Regional Interoperable Field Operations Guide (RIFOG) workshop services offered individually above. Urban areas, regions, Tribes, and States/Territories may, therefore, request RICP services individually or collectively. This package may also be requested alone or in combination with technical assistance services offered under other categories in this catalog.

NEW

RIC-PKG: Regional Communications Enhancement Package

This technical assistance package is designed to develop, disseminate, train, and exercise an urban area, regional, Tribal, and/or State/Territory RICP and the development of the RIFOG.

This package comprises the following individually offered services (detailed above):

- RIC-WKSP: RICP Workshop
- RIFOG-WKSP: RIFOG Workshop

The workshop will provide subject matter experts (SME)s for the components of the RICP addressed in the planning process.

Deliverables

- On-site workshop facilitation
- Document models and templates
- Populated RICP
- Populated RIFOG

Communication Assets Survey and Mapping (CASM) Tool Support

The Communication Assets Survey and Mapping (CASM) tool provides the ability for representatives of public safety agencies within an urban area, region, Tribe, or State/Territory to collect, store, and visualize data about agencies, communication assets, and how agencies use these assets. The CASM tool is composed of two components: Communication Assets Survey (CAS) and Communication Assets Mapping (CAM). The CAS component provides a means to enter, edit, and delete information about agencies, communication assets (such as radio systems, dispatch centers, mutual aid channels/systems, gateways, and radio caches), and agency usage of the assets. The CAM component provides a means to display this information in a map-based interface and provides analysis tools for displaying agency-to-agency interoperability, including interoperability gaps, in various ways.

CASM support services include:

- Initialization
- Roll-Out Strategy Webinar
- Training
- Data Import
- TICP/SCIP Interoperability Equipment and Usage Input
- Data Review/Analysis

In addition to these CASM services, help for CASM-related issues is provided via e-mail at CASM-support@spawar.navy.mil.

CASM-INIT: Initialization

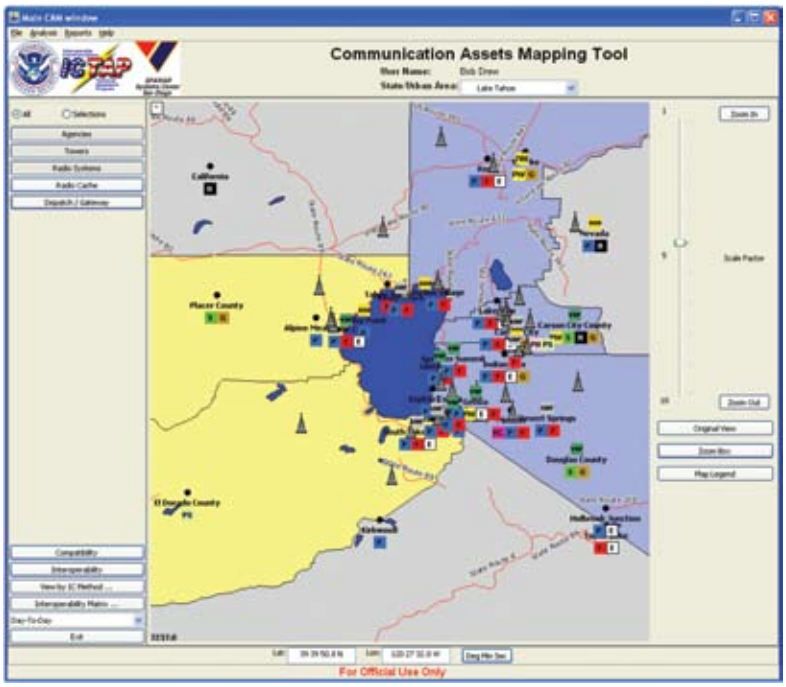
Description

This service offering provides the ability for an urban area, region, Tribe, or State/Territory to initiate use of CASM. The effort will create the User Account for the top-level Communication Assets Survey and Mapping (CASM) Administrative Manager and set up the database and map view in CASM for the requesting urban area, region, Tribe, or State/Territory. The State Administrative Agency (SAA) or designee must designate a CASM Administrative Manager (AM) (using the AM Authorization Memo, to be provided by the Site Point of Contact [POC]) to provide administrative support for CASM User Accounts in the urban area, region, Tribe, or State/Territory. The SAA or designee must complete, approve, and submit the User Account Request Form for the AM (via FAX to 619-553-4668 attn.: CASM; or e-mailing a scanned document to: CASM-support@spawar.navy.mil).

The CASM Team initiates the CASM database and map view for the urban area, region, Tribe, or State/Territory, creates the top-level AM User Account and provides the AM with a webinar and a copy of the Account Administration - Instruction Guide document when CASM is ready for use.

Deliverables

- State/Territory, Tribe or Urban Area setup in CASM
- CASM account for the urban area, region, Tribe, or State/Territory identified AM
- Webinar for the AM
- CASM Account Administration — Instruction Guide document



NEW CASM-STRAT: Roll-Out Strategy Webinar

Description

This service offering provides support to develop the appropriate roll-out strategy for the urban area, region, Tribe, or State/Territory using the CASM Data Collection Guidance document as a reference. The CASM Team will conduct a CASM strategy webinar with the interoperability leadership (for example SWIC, SIEC, and Interoperability Committee) to assist with the following:

- Defining a roll-out strategy based on identified goals
- Reviewing existing approaches in achieving like goals
- Identifying recommended CASM use to achieve goals
- Recommending AM hierarchy
- Identifying resources to support
- Establishing a timeline

Deliverables

- CASM strategy webinar
- Data Collection Guide document
- CASM Introduction Brief
- An agreed-to CASM roll-out strategy

CASM-TRAIN: Training

Description

This service offering provides two methods of Communication Assets Survey and Mapping (CASM) training for the Basic CASM course: (1) training at the SPAWAR Systems Center facility in San Diego, CA, or (2) training on-line via webinar. The number and method of training sessions is negotiable per TA Request.

The Basic CASM training course is provided by a CASM instructor who presents attendees with the basic operations of the CAS and CAM components. The course includes the use of CAS to enter, edit, and delete information about agencies, communication assets (such as radio systems, dispatch centers, mutual aid channels/systems, gateways, and radio caches), and agency usage of the assets. The course also includes the use of CAM to display CAS-entered data on a map-based interface and use of analysis tools for displaying agency-to-agency interoperability, including interoperability gaps, in various ways. A typical session is a 4-hour presentation that provides a combination of lecture and hands-on use. The webinar session minimizes the hands-on portion due to no instructor presence with the attendees.

CASM also provides monthly online Targeted Training. This training, typically offered three times a month, is available to all on a first come basis, and does not require a separate TA request to participate. Each session focuses on one CASM feature or function and is an hour long. All CASM users are invited to participate.

Deliverables

- Completed course with list of attendees
- Training Brief

CASM-IMPORT: Data Import

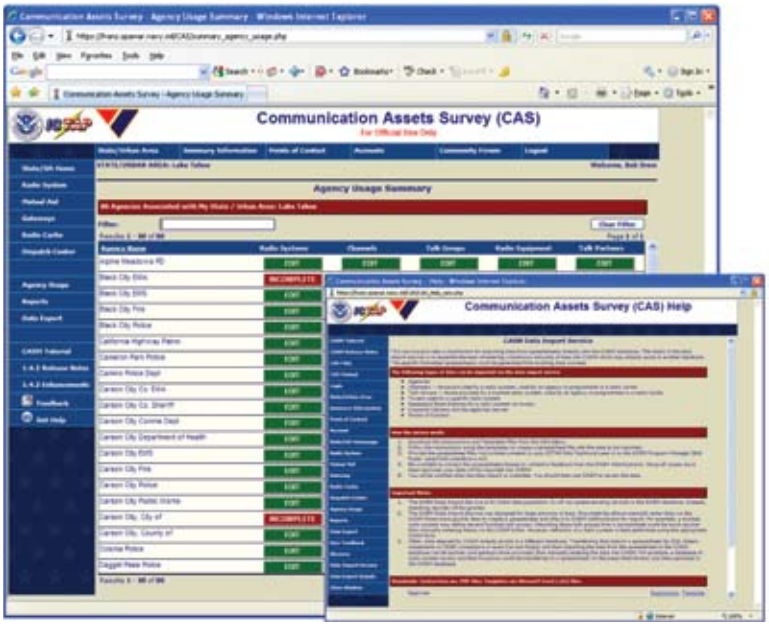
Description

This service offering provides a mechanism for importing data from spreadsheets directly into the Communication Assets Survey and Mapping (CASM) database. The intent of the data import service is to expedite the task of entering voluminous amounts of data into CASM that may already exist in another database. Data Import instructions and templates are provided in the CASM Data Import Service listed under CAS 'Help' on the CASM Website, https://franz.spawar.navy.mil/ (please note: a CASM user ID and password is required to get to CAS 'Help'). The number of imports is negotiable per TA Request.

Types of data that can be imported into CASM include:

- Agencies
- Channels — those provided by a radio system, used by an agency, or programmed in a radio cache
- Talk groups — those provided by a trunked radio system, used by an agency, or programmed in a radio cache
- Towers used by a specific radio system
- Repeaters/Base Stations for a radio system on towers
- Dispatch Centers and the agencies served
- Points of Contact

Once the data is provided to the CASM Team, it will be reviewed for duplicates to existing data already in CASM (that is, this is not an "update" function), and the CASM Team will discuss and resolve any inconsistencies and/or data errors with the provider prior to the physical import.



Deliverables

- Data populated in the CASM database

NEW

CASM-INPUT: TICP/SCIP Interoperability Equipment and Usage Input

Description

This service offering provides support for inputting the interoperable equipment information described in the urban area, region, Tribe, or State/Territory's Tactical Interoperable Communications Plan (TICP) or Statewide Communication Interoperability Plan (SCIP) into CASM. The intent of this data input service is to synchronize the TICP/SCIP specified interoperable equipment description and usage with the urban area, region, Tribe, or State/Territory's CASM dataset. The TICP/SCIP document is provided to OEC/ICTAP and the specified equipment information will be entered into CASM as a one-time effort (that is, the users are to maintain the information). The TICP/SCIP author/POC may be asked to resolve detailed questions that arise.

Deliverables

- The interoperability equipment specified in the TICP/SCIP will be populated in CASM

CASM-REV: Data Review/Analysis

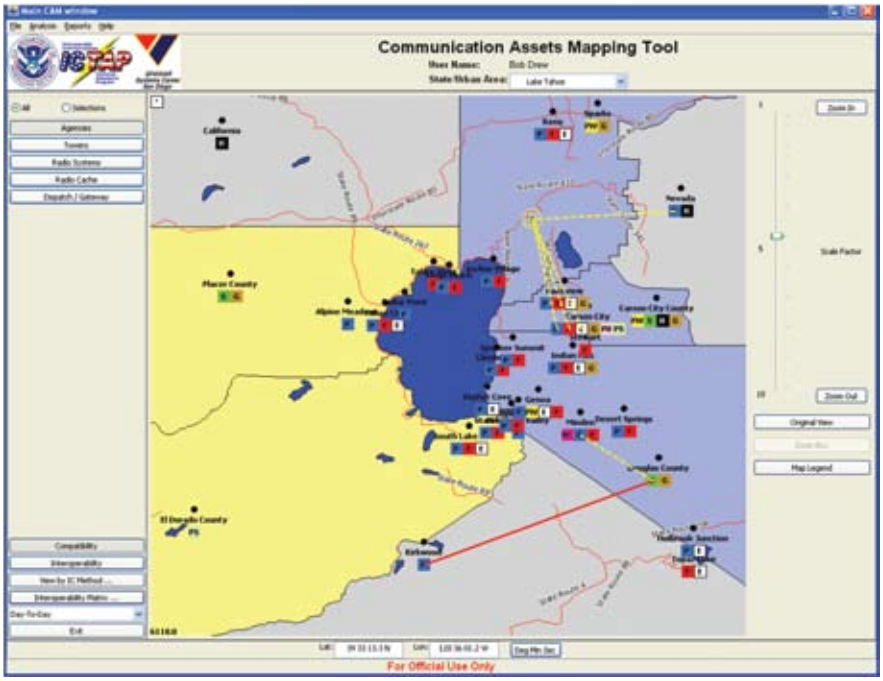
Description

This service offering provides an OEC/ICTAP review and analysis of any data entered into CASM by urban area, region, Tribe, or State/Territory representatives.

The scope of the requested review may include any/all jurisdictions including the entire urban area, region, Tribe, or State/Territory, county(ies), municipalities, or individual agencies allowing subsets of the data to be reviewed. This effort will review and analyze the existing data entered into CASM to identify any incomplete, inconsistent, or erroneous data entry. The review will also provide suggested actions that might be taken to provide a more accurate picture of interoperability, and highlight those areas where the data entry has been noteworthy; all designed to help the requestor better utilize CASM to provide a more accurate picture of interoperability in their area.

Deliverables

- CASM Data Review/Analysis Report that identifies issues found and suggested corrective actions; the CASM Team does not correct any of the data



CASM-PKG: CASM PACKAGE

Description

The CASM Package combines all of the Communication Assets Survey and Mapping (CASM) support services offered individually above.

This service offering provides the support for an urban area, region, Tribe, or State/Territory to use CASM. First, the urban area, region, Tribe, or State/Territory database and map is set up in CASM and a top-level CASM Administrative Manager User Account is created. Second, a roll-out strategy webinar is held with the urban area, region, Tribe or State/Territory's interoperability leadership group/committee to define the strategy for using CASM, and basic CASM training is provided for the identified user base. Third, this package provides import of urban area, region, Tribe, or State/Territory data and/or TICP/SCIP equipment data entry. Pre-population can help the urban area, region, Tribe, or State/Territory to get off to a faster start (with pre-populated data, users can focus on addition of systems, and on agency use of assets). Finally, this package provides a review/analysis of the data in the urban area, region, Tribe, or State/Territory's jurisdictions, to help identify incomplete and/or inconsistent data entries.

Appendix A

U.S. Department of Homeland Security

Homeland Security

Office of Emergency Communications
Technical Assistance (TA) Request Form for State/Local/Tribal Agencies

Upon completion, Print, Sign & Fax to 703 235 5798 or Scan and Email to oec@dhs.gov

Requestor contact information:

Name: Title: Agency:

Phone: Fax: Email Address:

Please indicate each TA Catalog offering requested for FY-2010 in order of priority, and describe in detail the assistance needed; how the technical assistance will meet identified SCIP initiatives or identified gaps; and the desired timeframe for providing the assistance. The scope of assistance to be delivered will be determined by available OEC TA resources. At least one initiative must provide direct support to a designated Urban/Metropolitan area.

Technical Assistance Required:

Priority	Description of Assistance	TA Offering	Timeframe	Primary Point of Contact
1				
2				
3				
4				

Urban / Metro	Description of Assistance	TA Offering	Timeframe	Primary Point of Contract
5				

*Include additional information regarding specific needs:

Interoperability Coordinator / SCIP POC Signature

State Administrative Agency

OEC Authorized Signature

Date

Date

Date

Paperwork Reduction Act Notice. We ask for the information on this form to carry out official business of the Department of Homeland Security. You are not required to give us the information. We need it to prioritize requests for Technical Assistance within authorized funding levels. You are not required to provide the information requested on a form that is subject to the Paperwork Reduction Act unless the form displays a valid OMB control number. The average time and expenses required to complete and file this form will vary depending on individual circumstance.

Appendix B OEC Alignment to the NECP: State and Local Milestones

In July 2008, OEC released the National Emergency Communications Plan (NECP), with a vision to ensure that emergency response personnel at all levels of government, and across disciplines, can communicate as needed, on demand, and as authorized. To achieve this vision, the NECP identifies the capabilities and initiatives needed for communications operability, interoperability, and continuity of communications for emergency responders nationwide. The NECP sets strategic goals and identifies national objectives to enhance governance, planning, technology, training and exercises, and disaster communications capabilities.

In addition, the NECP provides recommendations and milestones to guide emergency responders and relevant government officials to make measurable improvements in emergency communications thorough July 2011. To support agencies in meeting these goals, OEC has aligned a number of our technical assistance offerings to the specific milestones. The following chart provides a side by side map for agencies of the NECP milestone and the TA offering that supports it.

The NECP is available in PDF format at http://www.dhs.gov/xnews/releases/pr_1217529182375.shtm so readers can access the entire Plan if they wish.

OEC Alignment to the NECP

State/Local Milestones

Due Date	Initiative	Milestone	Catalog Offering
7/31/09	Initiative 1.1: Facilitate the development of effective governance groups and designated emergency communications leadership roles.	Establish a full-time statewide interoperability coordinator or equivalent position	GOV-ASMT; GOV-GSM; GOV-DOC
7/31/09	Initiative 1.1: Facilitate the development of effective governance groups and designated emergency communications leadership roles.	Incorporate the recommended membership into the Statewide Interoperability Governing Body (SIGB)	GOV-ASMT; GOV-GSM; GOV-DOC; GOV-SCIP
7/31/09	Initiative 1.1: Facilitate the development of effective governance groups and designated emergency communications leadership roles.	Establish the SIGB via legislation or executive order	GOV-GSM; GOV-DOC
7/31/09	Initiative 1.3: Integrate strategic and tactical emergency communications planning efforts across all levels of government.	DHS will make available an effective communications asset management tool containing security and privacy controls to allow for nationwide intergovernmental use	CASM-INIT,CASM-STRAT,CASM-TRAIN, CASM-IMPORT, CASM-INPUT, CASM-REV, CASM-PKG
7/31/09	Initiative 1.3: Integrate strategic and tactical emergency communications planning efforts across all levels of government.	DHS will make available an effective communications asset management tool containing security and privacy controls to allow for nationwide intergovernmental use	TIC-WKSP; TIC-PIW; TIC-FOG; TIC-PKG, RIC-WKSP, RICFOG-WKSP
1/31/10	Initiative 3.1: Standardize and implement common operational protocols and procedures.	Program nationwide interoperability channels into all existing emergency responder radios	SOP-DEV, SOP-ASMT, TIC-WKSP, RICP-WKSP
7/31/10	Initiative 3.1: Standardize and implement common operational protocols and procedures	Incorporate the use of existing nationwide interoperability channels into SOPs, training, and exercises	SOP-DEV; TIC-WKSP; TIC-FOG; OP-TTX; OP-FE / FSE; OP-ASMT, SOP-ASMT, RIC-WKSP, RICFOG-WKSP
7/31/10	Initiative 3.1: Standardize and implement common operational protocols and procedures.	Update SCIP to reflect plans to eliminate coded substitutions throughout the ICS	GOV-SCIP
7/31/09	Initiative 3.2: Implementation of the NIMS and the NRF across all levels of government.	Implement the Communications and Information Management section of the NIMS	TRG-COML; TRG-COML TtT; TRG-ICS
1/31/10	Initiative 3.3: Develop and implement model SOPs for specified events and all-hazards response	Collaborate with partner emergency communications organizations to disseminate model SOPs and provide SOP training by mission type	SOP-ASMT; SOP-DEV
12/31/09	Initiative 3.3: Develop and implement model SOPs for specified events and all-hazards response	Within 18 months, DHS makes standards and compliance information available to emergency response agencies to help inform their communications equipment purchases (e.g., the Authorized Equipment List [AEL] and the Standardized Equipment List [SEL])	ENG-P25; ENG-P25W; ENG-MW
3/30/09	Initiative 4.2: Research, develop, test, and evaluate new voice, video, and data solutions for emergency communications based on user-driven needs and requirements	Within 9 months, emergency response agencies identify and prioritize near-term (3–5 years) requirements	ENG-MIG; ENG-COV; ENG-DT
6/30/09	Initiative 4.3: Transition to and/or integrate legacy systems with next-generation technologies based on voluntary consensus standards	Within 12 months, DHS publishes the results of pilots and evaluations of emerging technologies making this information available to emergency response agencies and the private sector to support their migration planning, standards development, and product development efforts	ENG-SYS
1/31/10	Initiative 5.1: Develop and implement national training programs and certification process	Develop and use standardized training and credentialing for COML and other ICS Communications Unit Positions across the Nation	TRG-COML,TRG-COML TtT
1/31/10	Initiative 5.1: Develop and implement national training programs and certification process	Establish a certification process for other emergency communications users and providers, including COMT, dispatchers and emergency response providers	TRG-ICS, TRG-COML, TRG-COML TtT
1/31/10	Initiative 5.3: Provide targeted training to improve skills and capabilities of technial staff	Provide educational and training opportunities to emergency response agencies per requests through technical assistance programs	TRG-COML; TRG-ICS; TRG-COML TtT: ENG-P25W; ENG-AG
7/31/10	Initiative 7.2: Implement disaster communications planning and preparedness activities	Complete disaster communications training and exercises	OP-TTX; OP-EXTTX; OP-FE; OP-FSE; OP-SPEV,TRG-COML, TRG-COML TtT
7/31/10	Initiative 7.2: Implement disaster communications planning and preparedness activities	Federal, State, local, and tribal agencies in UASIs will have defined alternate/backup capabilities in emergency communications plans	SOP-DEV; TIC-WKSP; GOV-SCIP,SOP-ASMT, RIC-WKSP, TIC-COM